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// [迴文詞/Palindromes]
#define IN "P0307IN.txt"
#define OUT "P0307OUT.txt"
// *****
#include <iostream>
#include <time.h>
using namespace std;
void redir(void);
// *****
/* Work Space*/
char *rev = "A 3 HIL JM O 2TUVWXY51SE Z 8 "; //注意空白字元的數目
char *meg[] = {"not a palindrome",
               "a regular palindrome",
               "a mirrored string",
               "a mirrored palindrome"};

char mirrored(char ch); //傳回字元的鏡像
// *****
int main(void)
{
    redir(); //redirection
// *****
/* Work Space*/
    char s[32];
    int length;
    int p, m;
    int i;

    while(scanf("%s", s) == 1){
        length = strlen(s);
        p = m = 1;

        for(i=0; i < (double)length/2; i++){//注意轉型
            if(p && s[i] != s[(length-1)-i]){//short-circuit
                p = 0;
            }
            if(m && mirrored(s[i]) != s[(length-1)-i]){
                m = 0;
            }
        }

        printf("%s -- is %s.\n\n", s, meg[m*2+p]);
    }
// *****
    freopen("CON", "r", stdin); //取消重新導向
    freopen("CON", "w", stdout);

    printf("Time used = %.2f\n", (double)clock()/CLK_TCK); //傳回程式目前為止執行的時間

    system("pause");
    return 0; //the end...
}

void redir(void)
{
    freopen(IN, "r", stdin);
    freopen(OUT, "w", stdout);
}
// *****
/* Work Space*/
char mirrored(char ch) //傳回字元的鏡像

```

```
{
    if(isalpha(ch)){
        return rev[ch-'A'];
    }else{
        return rev[ch-'0'+25];
    }
}
```